



JOHN F. KENNEDY SPACE CENTER



# LAUNCH SITE INTEGRATION

NASA ELV Payload Safety Workshop

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at VAFB

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# Launch Site Integration



- **Launch Site Integration is:**
  - **Planning for and providing facilities, services and support required for safe and effective spacecraft (SC) launch site processing**
    - » **Stand Alone Processing**
    - » **Integrated Processing with the Launch Vehicle (LV)**
  - **Ensuring the SC launch site processing activities are included in the launch site and LV planning and operations**
  - **Ensuring the launch site and LV activities and requirements are included in the SC planning**



# Launch Services Program (LSP) Mission Management



**The Mission Integration Team, or MIT, is a multi-discipline team that is tasked by the Launch Services Program with the responsibility of managing all integration, vehicle engineering and launch site processing aspects of the NASA SC assigned mission.**

- **Mission Manager (MM)**
  - The project manager and primary customer interface for mission specific integration. This person has overall mission management responsibilities for technical, contract deliverables, resources and schedule.
- **Program Integration Manager**
  - Provides program and business management for the launch services contract, including specialized support in procurement and resource management.
- **Integration Engineer (IE)**
  - Technical lead for the mission specific integration including mission requirements definition, development and verification, and providing the interface with the Fleet Systems Branch for gaining insight into fleet status and assigned hardware production issues.



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# Launch Services Program (LSP) Mission Management



## The Mission Integration Team (MIT) *continued*:

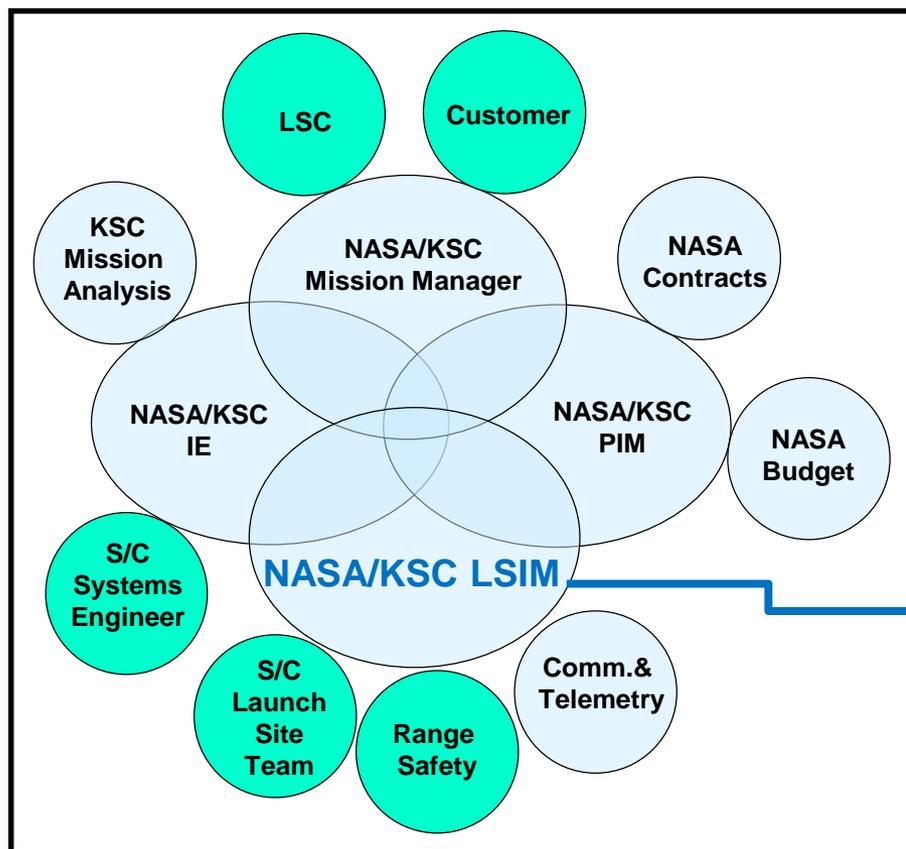
- **Launch Site Integration Manager (LSIM)**
  - **The LSIM is the primary interface for planning of launch site processing of the SC**
    - provides launch site processing expertise and knowledge of launch site processing and services
    - performs advanced planning to assist the customer in defining launch site requirements
    - integrates the launch site planning effort, serving as the interface to the customer to receive, track, and negotiate launch site requirements.
  - **The LSIM provides technical oversight of launch site spacecraft processing.**
    - primary operations interface between the SC and the Payload Processing Facility (PPF)/Launch Vehicle operations personnel
    - supports launch day operations as the NASA SC Coordinator (NSC)
- **Resident at KSC/CCAFS and VAFB**



# Mission Integration Team (MIT) Structure



## Mission Integration



- KSC Organizations
- Outside Organizations

## Launch Site Support Team (LSST)

- Commercial/Government PPF
- Launch Site Support Engineer (LSSE)
- Customer Processing Support Manager (CPSM)
- Mission Integration Coordinator
- Launch Site Support Coordinator
- NASA/KSC Safety
- NASA/KSC Security
- KSC Public Affairs
- NASA/KSC Health Physics



# Launch Site Integration Planning Activities (1 of 2)



- **Advanced Planning (Launch-5 yr – L-2 yr)**
  - Provide consulting/expertise to customer regarding PPFs, requirements, and special support requirements
  - Attend SC Preliminary Design Review (PDR) and Critical Design Review (CDR), review SC documentation
  - Host PPF familiarization meetings/tours
- **SC Processing Requirements Development (L-3 yr – L-6 mo)**
  - Identify/define customer requirements and plans
  - Document customer requirements and plans
    - » **Launch Site Support Plan (LSSP)**
      - Documents SC processing support requirements at the launch site
      - Preliminary at Arrival-16 mo, Baseline at A-4 mo
      - Jointly signed by LSIM, SC representative and Launch Services Contractor (LSC) representative
      - LSSP is attached to Commercial PPF contract
    - » **Program Requirements Document (PRD)/Operations Requirement (OR)**
      - Documents services from KSC providers to meet SC requirements
      - Obtains commitments from providers to meet SC requirements



# Launch Site Integration Planning Activities (2 of 2)



- **SC Processing Requirements Development (L-3 yr – L-6 mo)**  
*continued*
  - **Chair Ground Operations Working Group (GOWG) meetings**
    - » **Conducted periodically (typically every 6 months)**
    - » **Solicit SC launch site requirements**
    - » **Develop operations plans and documentation**
    - » **Resolve launch site processing and operations issues**
  - **Obtain commercial PPF contract**
    - » **Includes hazardous assembly, fueling and checkout areas**
    - » **Includes ordnance and propellant storage**
  - **MIWG Participation**
    - » **Support topics which affect SC launch site processing**
    - » **Resolve launch site support and operations issues**
  - **Safety Interfaces**
    - » **Non-voting member of the Payload Safety Working Group (PSWG)**
    - » **Primary interface for receipt and distribution of hazardous operations procedures and ground operations plan**
    - » **Reviews MSPSP**



# Launch Site Integration Operations Support Activities (1 of 2)



- **Pre-Arrival Readiness Reviews (30–10 days prior to SC arrival)**
  - **Ground Operations Review (GOR)**
    - » To certify that John F. Kennedy Space Center (KSC) and the PPF planning activities are complete and that resources and facilities are ready to support receipt and processing of the spacecraft
    - » To ensure the spacecraft team, the spacecraft, equipment and procedures will be ready and available to support the start of launch site operations.
    - » To ensure that the current configuration of the spacecraft and processing planned by the Project are consistent with those for which launch site personnel have been planning
    - » To certify that documentation is complete and/or approved to support receipt of spacecraft at the PPF for processing
      - Ensuring that the appropriate safety approvals are obtained
    - » To identify and document any constraints which may exist to preclude shipment to, or processing of the spacecraft at the launch site
  - **SC Pre-Ship Review**
    - » Report launch site readiness for SC processing



# Launch Site Integration Operations Support Activities (2 of 2)



- **SC Testing and Processing (PPF and Pad)**
  - **Continuous SC interface during launch site processing**
    - » **Meet daily with SC and LV to determine activity schedule and support required**
    - » **Provide continuous presence to ensure support availability**
    - » **Serve as NSC during SC pad testing and operations**
    - » **Assist with interfaces to launch site organizations, including safety organizations (facility, vehicle, Range)**
  - **Implement the required & agreed upon support including pad safety for SC testing and ops**
  - **Ensure SC complies with commercial PPF, KSC and Range safety policies**
  - **Advocate for customers to resolve any issues**
- **Launch Day**
  - **Serve as NSC during launch activities**
  - **Continuing SC interface as the primary point of contact between SC test conductor and launch conductor (LC)**
  - **Support Integrated Response Team as appropriate**



# Guide to NASA Spacecraft Processing



- **Guide to NASA Spacecraft Processing**

- Published for KSC/CCAFS, LSP-UG-332.01, and VAFB, LSP-UG-332.02.
- Provides description of the process used in launch site integration.
- Provides a summary of the regulations and requirements for processing at the respective launch site.
  - The documentation LSP needs from the customer to demonstrate their ability to meet the NASA and location requirements listed in this guide are summarized as “customer deliverables”
  - An example of the generic customer deliverables are included on the following slides.



# Generic Launch Site Deliverables Table (1 of 12)



## Launch Site Deliverables

NASA Launch Services Program (LSP) Spacecraft Program Deliverables

Spacecraft Program = [Spacecraft]

Rev. Date = [Date]

Arrival Date (70-90 days <launch)

Launch Date

[Need Date to be completed by LSIM]

[Date]

[Date]

Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
LS1	[Mission Name] Launch Site Requirements Development						
LS1.1	Provide the appropriate representation and participation at GOWG's.  - Provide <b>presentations</b> required by the co-developed agenda.	LSP-UG-330.01, BOSS LSP-UG-332.01 LSP-UG-332.02	Minutes	1 week prior to GOWG  Typically 2 times a year depending on mission life cycle stage and mission complexity	Y		
LS1.2	Provide requirements to LSIM for Preliminary Launch Site Support Plan (LSSP).  - Provide a preliminary launch site operations flow plan (launch site operations plan). - Provide preliminary launch site computer networking requirements (ASO-E processing). - Provide any Non-Standard requirements (COMSEC, RTGs, highly contamination sensitive, etc.).	LSP-UG-332.01 LSP-UG-332.02 ASO-FL-CI-COMM-002 ASO-FL-CI-COMM-003	Draft Preliminary LSSP	17-27 months prior to SC arrival	Y		
LS1.3	Provide concurrence for Preliminary LSSP Release.	LSP-UG-332.01 LSP-UG-332.02	Released Preliminary LSSP	16 months prior to SC arrival	Y		
LS1.4	Provide inputs for Baseline LSSP.	LSP-UG-332.01 LSP-UG-332.02	Final Draft LSSP	5-7 months prior to SC arrival	Y		



# Generic Launch Site Deliverables Table (2 of 12)



Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
LS1.5	Provide final inputs/signature for Baseline LSSP release.	LSP-UG-332.01 LSP-UG-332.02	Released Baseline LSSP	4 months prior to SC arrival	Y		
LS1.6	Provide the appropriate representation and participation at the GOR.  - Provide a presentation on spacecraft status and readiness to ship to the launch site.	LSP-UG-330.01, BOSSLSP-UG-332.01 LSP-UG-332.02	Minutes Launch Site Readiness to Receive SC	GOR held ~ 1 month prior to arrival Submit charts 1 week prior to GOR	Y		
LS2	<b>[Mission Name] Launch Site Access and Accommodations</b>						
LS2.1	Submit foreign national access documentation.  <b>For KSC and CCAFS foreign national access.</b> - Submit foreign national visit request. - Submit personnel badging information (badge will be escort only and a temporary badge).  <b>For VAFB and Commercial Facility access</b> - Submit personnel badging information.	NPR 1600.1 30SW 31-101	Approval Email/Access List	KSC - 45 days prior to arrival VAFB - 30 days prior to arrival Commercial - 30 days prior to arrival	Y		



# Generic Launch Site Deliverables Table (3 of 12)

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Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
LS2.2	<p>Submit US person's access documentation.</p> <p><b>For KSC and CCAFS US persons access</b></p> <ul style="list-style-type: none"> <li>- Submit personnel badging information (badge will be temporary badge).</li> </ul> <p><b>For VAFB and Commercial Facility US persons access</b></p> <ul style="list-style-type: none"> <li>- Submit personnel badging information.</li> </ul>	<p>NPR 1600.1 30SW 31-101 Facility Security Manual</p>	Approval Email/Badge	30 days prior to arrival	Y		
LS2.3	Submit Personnel Deployment Plan.	<p>LSP-UG-332.01 LSP-UG-332.02</p>	Approved plan	90 days prior to arrival	N		
LS2.4	Submit Personnel Medical Certifications (Lifting equipment, Propellant) or Personnel Operational Training Certification/Letter (for Commercial PPF).	<p>LSP-UG-332.01 LSP-UG-332.02 KSC-UG-1800 Facility Safety Manual</p>	Approval to operate/handle appropriate equipment	30 days prior to arrival	Y		
LS2.5	Submit Personnel Training Class Request(s).	<p>LSP-UG-332.01 LSP-UG-332.02</p>	Training class provided	30 days prior to need date	Y		
<b>LS3</b>	<b>[Mission Name] Working at the Launch Site</b>						
LS3.1	<p>Submit Camera Permit Request</p> <ul style="list-style-type: none"> <li>- CCAFS Operations</li> <li>- Foreign Nationals at VAFB</li> </ul>	<p>30SW 31-101 ASOF-FACL-M0008 ASOF-FACL-M0011</p>	Approved use of cameras	3 weeks prior to need	N		
LS3.2	Submit permits for welding/hot work (if needed) at NASA Facilities.	<p>KNPR 8715.3 NPR 8715.3</p>	Approval to perform welding/hot work on site	1 week prior to need	Y		



# Generic Launch Site Deliverables Table (4 of 12)

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Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
<b>LS4</b>	<b>[Mission Name] ELV Payload Safety Program</b>						
LS4.1	<p>Provide Payload Safety Introduction Briefing to NASA and Range Safety (this can be held in conjunction with the Mission Concept Briefing).</p> <ul style="list-style-type: none"> <li>- Identify applicable safety requirements documents, tailoring assumptions and issues.</li> <li>- Submit Draft Systems Safety Plan.</li> <li>- Identify known spacecraft/spacecraft systems and a preliminary assessment of potential hazards in a Preliminary hazard List.</li> <li>- Present a high level Ground Operations Flow overview.</li> <li>- Overview of the Mishap Preparedness and Contingency Plan (MPCP).</li> </ul>	<p>NASA-STD-8719.24; AFSPCMAN 91-710; EWR 127-1</p> <p>NPR 8715.7</p>	Deliverable direction, tailoring direction	<p>No later than midpoint of the Preliminary Design Phase, Phase B per NPR 7120.5</p> <p>Typically 33-45 months prior to arrival</p> <p>Electronic to Portal Web site</p>	N		
LS4.2	<p><b>Submit Safety Review I Data</b></p> <ul style="list-style-type: none"> <li>- Final SSP.</li> <li>- Tailored Spacecraft Safety Requirements.</li> <li>- Safety Data Package I (Draft MSPSP) (for complete list, see NPR 8715.7).</li> </ul>	<p>NASA-STD-8719.24; AFSPCMAN 91-710; EWR 127-1</p> <p>NPR 8715.7</p>	<p>Approval of SSP</p> <p>Assessment of safety effort and identification of safety concerns to support KDP C</p> <p>Spacecraft PDR input</p> <p>Safety Review I Closure Letter by PSWG Chair</p>	<p>No later than 30 days prior to PDR meeting or as necessary ensuring PSWG's timely input to Key Decision Point C per NPR 7120.5</p> <p>Typically 21-45 months prior to arrival</p> <p>Electronic to Portal Web site</p>	N		



# Generic Launch Site Deliverables Table (5 of 12)

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Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
LS4.3	<b>Submit Safety Review II Data</b> <ul style="list-style-type: none"> <li>- Final Tailored Spacecraft Safety Requirements.</li> <li>- Safety Data Package II (Preliminary MSPSP).</li> <li>- Ground Operations Plan (if not already included in the SDP II (Preliminary MSPSP).</li> <li>- Safety Action Tracking Log (for complete list, see NPR 8715.7).</li> </ul>	NASA-STD-8719.24; AFSPCMAN 91-710; EWR 127-1  NPR 8715.7	Approval of Final Tailored Spacecraft Safety Requirements  Assessment of safety effort and identification of safety concerns to support KDP D  Spacecraft CDR input  Safety Review II Closure Letter by PSWG Chair	No later than 30 days prior the project's CDR or as necessary ensuring PSWG's timely input to Key Decision Point D as defined in NPR 7120.5  Typically 21-24 months prior to arrival  Electronic to Portal Web site	N		
LS4.4	<b>Submit Safety Review III Data</b> <ul style="list-style-type: none"> <li>- Safety Data Package III (Final MSPSP).</li> <li>- Final GOP (If not already included in the SDP III/Final MSPSP).</li> <li>- Signed Safety Waivers.</li> <li>- Safety Verification Tracking Log.</li> <li>- Safety Action Tracking Log.</li> <li>- Project Signed Certificate of ELV Spacecraft Safety Compliance (for complete list, see NPR 8715.7).</li> </ul>	NASA-STD-8719.24; AFSPCMAN 91-710; EWR 127-1  NPR 8715.7	VAFB/CCAFS - Range Safety Launch Operations Approval Letter, if desired  Safety Review III Closure Letter by PSWG Chair  ELV Certificate of ELV Spacecraft Safety Compliance by Spacecraft Safety Manager	No later than 90 days before hardware shipment to the processing site  Electronic to Portal Web site	Y		
LS4.5	Submit Safety Verification Tracking Log (SVTL).	NASA-STD-8719.24; AFSPCMAN 91-710; EWR 127-1	Local safety approval of open SVTL actions	Weekly upon arrival at the launch site	Y		



# Generic Launch Site Deliverables Table (6 of 12)

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Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
		NPR 8715.7		Electronic to Portal Web site			
<b>LS5</b>	<b>[Mission Name] Launch Site Procedures</b>						
LS5.1	Submit list of all Customer launch site procedures (Hazardous & Non-Hazardous).	NASA-STD-8719.24; AFSPCMAN 91-710; EWR 127-1		90 days prior to arrival	Y		
LS5.2	Submit Customer Launch Site Procedures (Including Pad Contingency SC Fuel Off-Load Plan).	NASA-STD-8719.24; AFSPCMAN 91-710; EWR 127-1  KNPR 8715.3 ASOF-FACL-M0008 ASOV-FACL-M0011 IPF 96 SA01	Approved Procedure and authorization to use	55 days prior to first use	Y		
LS5.3	Submit final transportation plan/schedule and arrival day badging request.	LSP-UG-332.01 LSP-UG-332.02 49 CFR	Approved Plan and Badging	30 -45 days prior to arrival	N		
LS5.4	Submit Hurricane Plan (if at ASO-E, KSC, or CCAFS between June 1st and Nov 30th).	KDP-KSC-P-3006 ASOF-FACL-M0008 LSP-F-361.01	Approved Plan and authorization to be on KSC, ASO or CCAFS property	Upon arrival	Y		
LS5.5	Work Time Policy Review.	KNPR 8715.3 AFSPCMAN 91-710	Review to ensure compliance with NASA and AF regulations	Upon arrival	Y		



# Generic Launch Site Deliverables Table (7 of 12)



Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
<b>LS6</b>	<b>[Mission Name] Environmental Management</b>						
LS6.1	Submit Environmental Impact Analysis (AF Form 813).	40CFR1500	FONSI or Handling Requirements	9 months prior to SC arrival	N		
LS6.2	Maintain Solvent Tracking Log.	LSP-UG-332.01 LSP-UG-332.02 KNPR 8500.1	Compliance with Environmental Regulations	Upon arrival	Y		
<b>LS7</b>	<b>Materials Control</b>						
LS7.1	Submit list (& test samples as required) of GSE plastics, films, & adhesive tapes used.	KTI-5212 <a href="http://maptis.nasa.gov">maptis.nasa.gov</a>	Testing results for samples  List approval for use in facilities	5-9 months prior to SC arrival	Y		
LS7.2	Submit Safety Data Sheet (SDS).	KNPR 1840.1 NASA-STD-8719.24 OSHA	Availability for all personnel working near spacecraft	60 days prior to arrival (ASO can be NLT 14 days prior to arrival)	Y		



# Generic Launch Site Deliverables Table (8 of 12)



Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
LS7.3	<p>Provide hazardous waste management information, including the point of contact (POC)</p> <p><b>For KSC processing</b></p> <ul style="list-style-type: none"> <li>- Submit KSC Form 26-551 "Process Waste Questionnaire".</li> <li>- Submit Waste Management Training memo.</li> </ul> <p><b>For Commercial processing</b></p> <ul style="list-style-type: none"> <li>- Submit chemicals list for commodities (if list is not included in the SDP).</li> <li>- Coordinate with the LSIM and PPF Mission Manager if hazardous waste will be generated. PPF will assume responsibility for labeling, storing, and disposing of hazardous waste.</li> </ul>	<p>LSP-UG-332.01 LSP-UG-332.02 KNPR 8500.1 IPF 96 SA01 ASOF-FACL-M0008 ASOV-FACL-M0011</p>	Compliance with Environmental Regulations	6 months prior to arrival	Y		



# Generic Launch Site Deliverables Table (9 of 12)

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Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
LS8	[Mission Name] Radiation Control						
LS8.1	<p>Ionizing Radiation Source Use Authorization.</p> <p><b>For NASA Facilities Processing</b></p> <ul style="list-style-type: none"> <li>- Submit KSC Form 16-295 <i>Radiation Use Request/Authorization (Radioactive Materials)</i> (or)</li> <li>- Submit KSC Form 28-34, <i>Radiation Use Request/Authorization (Ionizing Machine / Device)</i>.</li> </ul> <p><b>For Commercial Facilities Processing</b></p> <ul style="list-style-type: none"> <li>- Submit State of Florida Proof of Registration [ASO FL only].</li> <li>- Submit appropriate license [ASO FL only].</li> <li>- Provide a state qualified Radiation Protection Officer for radiation associated activities [ASO FL only].</li> <li>- Submit detailed data on ionizing source.</li> <li>- Submit documentation on leak testing, wipe testing, packaging, transportation, and radiation source transfer accountability.</li> <li>- Submit a radiation hazard facility assessment.</li> </ul>	<p>KNPR 1860.1</p> <p>ASOF-FACL-M0008 ASOV-FACL-M0011 IPF 96 SA01</p>	<p>Approval to process/operate at the appropriate facility.</p>	<p>4 months prior to arrival</p>	<p>Y</p>		



# Generic Launch Site Deliverables Table (10 of 12)

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LAUNCH SERVICES PROGRAM

Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
LS8.2	<p>Ionizing Radiation User Requirements.</p> <p><b>For NASA Facilities Processing</b></p> <ul style="list-style-type: none"> <li>- Submit KSC Form 16-294, <i>Training and Experience Summary - Ionizing.</i></li> </ul> <p><b>For Commercial Facilities Processing</b></p> <ul style="list-style-type: none"> <li>- Provide personnel training and experience summary.</li> </ul>	<p>KNPR 1860.1</p> <p>ASOF-FACL-M0008 ASOV-FACL-M0011 IPF 96 SA01</p>	<p>Approval to process/operate at the appropriate facility.</p>	<p>4 months prior to arrival</p>	<p>Y</p>		
LS8.3	<p>Ionizing Radiation Transportation to/from NASA Property.</p> <p><b>To/from NASA property</b></p> <ul style="list-style-type: none"> <li>- Submit DD Form 1149, <i>Request for Shipping Document.</i></li> <li>- Submit KSC Form 28-45NS, "</li> <li>- Submit KSC Form 7-526NS, <i>Radioactive Material Transfer and Shipment Record (Outbound)</i></li> </ul> <p><b>To/from Non-NASA property</b></p> <ul style="list-style-type: none"> <li>- The licensee will note DOT regulations. Areas referenced included: packaging, marking/labeling, placarding, accident reporting, shipping papers, training, security plans, and hazardous material shipper/carrier registration.</li> </ul>	<p>KNPR 1860.1</p>	<p>Approval to process/operate at the appropriate facility.</p>	<p>4 months prior to arrival</p>	<p>Y</p>		



# Generic Launch Site Deliverables Table (11 of 12)

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Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
LS8.4	<p>Nonionizing Radiation Source Use Authorization.</p> <p><b>For NASA Facilities Processing</b></p> <ul style="list-style-type: none"> <li>- Submit KSC Form 16-447, <i>Laser Device Use Request/Authorization</i> for laser and laser systems.</li> <li>- Submit KSC Form 28-626, <i>Optical Device Use Request/Authorization</i> for nonlaser optical radiation devices.</li> <li>- Submit KSC Form 16-451, <i>Radio Frequency /Microwave Systems Use Request /Authorization</i>.</li> </ul> <p><b>For Commercial Facilities Processing</b></p> <ul style="list-style-type: none"> <li>- Submit personnel protection analysis to ASO Florida.</li> <li>- Submit RF compatibility analysis.</li> <li>-</li> </ul>	<p>KNPR 1860.2</p> <p>ASOF-FACL-M0008 ASOV-FACL-M0011 IPF 96 SA01</p>	Approval to process/operate at the appropriate facility.	4 months prior to arrival	Y		
LS8.5	<p>Non-Ionizing Radiation User Requirements.</p> <p><b>For NASA Facilities Processing</b></p> <ul style="list-style-type: none"> <li>- Submit KSC Form 16-450, <i>Training and Experience Summary - Nonionizing</i>.</li> </ul> <p><b>For Commercial Facilities Processing</b></p> <ul style="list-style-type: none"> <li>- Submit a summary of personnel training and experience.</li> </ul>	<p>KNPR 1860.2</p> <p>ASOF-FACL-M0008 ASOV-FACL-M0011 IPF 96 SA01</p>	Approval to process/operate at the appropriate facility.	4 months prior to arrival	Y		



# Generic Launch Site Deliverables Table (12 of 12)



Item #	Item	Source Requirement for Item	Launch Site Response to Item	Submittal Requirements and Delivery Requirements	LV Deliverable for NASA Provided PPF	SC Need Date	LV Need Date
LS8.6	Submit information to the LSIM so they can obtain Radio Frequency Authorization/ Coordination Forms.  <ul style="list-style-type: none"> <li>- For KSC/CCAFS launch, provide information for KSC Form 7-651.</li> <li>- For VAFB launch the LSIM will coordinate with range scheduling for RF frequency authorization.</li> </ul>	<p>KNPR 2570.1  NPR 2570.1B  ASOF-FACL-M0008  ASOV-FACL-M0011</p>	Approval to operate on VAFB/30th Range and KSC/ 45th Range	4 months prior to arrival	N		
LS9	[Mission Name] Mishap Preparedness						
LS9.1	Provide Launch Day Mishap Debris Team POC.	NPR 8621.1	Coordinated MPCP	45 days prior to launch	N		
LS9.2	Provide SC ordnance closeout photos and photos of SC hazardous components.	NASA-STD-8719.24; AFSPCMAN 91-710; EWR 127-1	Range debris recovery planning	30 days prior to arrival on AF property	N		

Purple – KSC specific  
Green - VAFB specific



## Summary



- **Launch Site Integration, and the entire MIT team, will work to make sure all the SC customer requirements are implemented satisfactorily.**
- **Launch Site Integration will assist the NASA SC customer to navigate the launch site requirements and regulations, including safety.**